

## DOCUMENT RESUME

ED 120 961

EA 008 124

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TITLE The Multidimensional World of the School Principal.  
PUB DATE Apr 75  
NOTE 19p.; Paper presented at the Annual Meeting of the American Educational Research Association (60th, Washington, D.C., March 30-April 3, 1975)  
EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage  
DESCRIPTORS Administrative Personnel; \*Administrator Role; Elementary Secondary Education; Factor Analysis; \*Principals; \*Role Models; \*School Administration; Statistical Analysis; \*Task Analysis  
IDENTIFIERS \*School Principals Task Inventory; SPTI

## ABSTRACT

While much research has been done on the administrative style of school principals, it has concentrated mainly on how the principal does what he does. This study investigated the content dimensions of the principal's role in response to the need for research on the impact of evolving environments on the changing role of school principals and the need for new understandings and tools to support staff development of school principals. The School Principals Task Inventory (SPTI I), an initial 52-item instrument, was prepared and submitted to graduate students in education. Based on a factor analysis of the responses, a revised instrument, SPTI II, was prepared and administered to a new sample of graduate students in education. Stability of the factors was tested by analyzing the extent that the 34 retained items on SPTI II clustered similarly to the items on SPTI I. Of 12 factors that emerged from analysis of responses to SPTI I, 7 appeared in essentially the same form among the 10 factors constituting the subscales of SPTI III, a refined 46-item subset of SPTI II. (Author/JG)

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THE MULTIDIMENSIONAL WORLD  
OF THE SCHOOL PRINCIPAL

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A Paper presented at the Annual Meeting of the  
American Educational Research Association  
Washington, D.C. April, 1975.

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## The Multidimensional World of the School Principal

By Alan K. Gaynor

### THE RATIONALE

Much has been written of the accelerating pace of change in American society and of its impact upon the governance and management of American schools (Harman, 1970). Consistent with the changing environment of schools are two lines of reasoning which have led the author to the current research on the role of the school principal. The first of these has to do with a hypothesis first applied to organizations by Emery and Trist (1965) and later elaborated upon by Terreberry (1968). The second has to do with the growing movement toward accountability and the performance assessment of educational personnel, administrators as well as teachers

I have made the argument elsewhere (Gaynor, 1975) that the environment of our schools may be evolving from the "placid-clustered" type to the "turbulent field" type (Terreberry, 1968). The evolution hypothesized is from a situation characterized by an unorganized environment in which the school system is essentially in control to a situation characterized by an environment in which multiple, highly interactive formal and informal organizations and coalitions are in conflict with the school and with one another, both directly and through increasingly more powerful regulatory agencies (e.g., the courts and the state labor relations boards).

The concept of turbulent field environment seems to be descriptive of either a present state of being or an evolutionary point of reference for many school systems, especially those in highly urbanized settings. At the same time, large numbers of school systems remain in environments which are either relatively homogeneous and stable or at only an early stage of evolution toward turbulence. The result is a high degree of environmental variation and major differences in environmental press across school systems.

One of the principal effects of environmental evolution is upon the role of boundary spanning personnel at all levels of the system. Evolution toward turbulence in the environment increases significantly the importance of current and accurate information about events external to the school system. Since the system is dependent upon boundary spanners for this kind of information, those who perform this intelligence function well (a) become highly valued and (b) control highly valuable information. Aside from the superintendent, there are probably no more critical boundary spanning personnel in school districts than building principals. The principal is the key person at the interface between the school system and the attendance area community.

The logic of the situation places the school principal, then, in a role which, as a key boundary spanning role, is unusually sensitive to evolutionary changes in the school environment. It can be hypothesized that in those school systems still opera-

ting in placid-clustered environments, the role of the principal remains internal and primarily bureaucratically oriented; however, as school systems find themselves in increasingly turbulent environments, the role of the principal should become more externally and politically oriented. Since there exists a mosaic of environmental patterns along this continuum, it seems critical for us to understand more precisely what the relationship is between the role expectations held for the school principal and the nature of the changing environments of schools. The current research seeks (a) to understand in what terms people think about the principal's role and (b) to develop a valid instrument as a necessary tool for further research.

A second rationale underlying the work reported in this paper is responsive to the growing movement toward assessing and improving administrator performance. The reported research grew out of a national project sponsored jointly by the Atlanta Public Schools and The University Council for Educational Administration. The UCEA-Atlanta Project had its origins in two independent interests that fused. The UCEA interest was prompted by an awareness of problems facing urban school leaders. The Atlanta public school system was concerned with designing effective staff development experiences for principals (Culbertson, et al., 1974).

Critical to this staff development function is an understanding of what the role of the principal is. It is well documented among theorists and researchers that discrepant expectations within the role set can affect the performance of persons in organizations (Getzels, et al., 1968; Gross, et al., 1958; Kahn, et al., 1964).

While much research has been done on the leader behavior (administrative style of school principals, this research has concentrated primarily upon process (how the principal does what he does) (Gross and Herriott, 1965; Stogdill, 1974) rather than upon content (what the principal does). What research has been done to understand the content dimensions of the principal's role has been preliminary and dependent upon instruments whose subscale validity has not been empirically established (e.g., Foskett, 1967).

The reported research, then, finds its rationale in two apparent needs which are important at this point in time: the need for research on the impact of evolving environments upon the changing role of school principals and the need for understandings and tools to support staff development of school principals in a time of growing press for accountability and performance assessment of educational administrators.

#### THE RESEARCH PROCEDURE

The first step in the research procedure was to establish a pool of potential items which would have credible comprehensiveness, at least as a starting point, with respect to the normative world of the school principal. Toward this end, the author drew upon the work of the Battelle Columbus Laboratories (1971) which had recently completed a major survey of the literature and of persons holding a wide range of positions in both the scholarly and practical worlds of education.

From this base an initial instrument (SPTI (I))<sup>1</sup> of 52 items

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<sup>1</sup>The School Principals Task Inventory (I).

was prepared. In 1973, responses to this instrument were collected from graduate students in education at Boston University and the Ontario Institute for Studies in Education.<sup>2</sup>

Based upon a factor analysis of the responses, a revised instrument (SPTI (II))<sup>3</sup> was prepared and administered in 1974 to a new sample (n=334) of graduate students in education at Boston University and the State University of New York at Albany.

The administration of SPTI (II) was designed to test two things: (1) the stability of the factors generated using SPTI (I), without confirmation of which further research and development would be on shaky ground, and (2) the accuracy of the researcher's understanding of the meaning of the factors generated using SPTI (I),

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<sup>2</sup>Data were collected from 233 respondents. Almost all of the respondents (n=220) were graduate students in the Boston University School of Education. The Boston sample included students taking classes in school administration, curriculum, reading and language. The remainder of the students (n=13) were summer school students in educational administration at O.I.S.E. Both samples included persons in their twenties as well as those in their fifties. The majority of respondents were in their late twenties, thirties, and forties. The Boston sample included a fairly even distribution of men and women. The Toronto sample was predominantly male. Both samples included teachers and school administrators. The Boston sample included some who held neither position. Precise figures are not available since in this phase of the research respondents were asked for neither names nor personal information. The sample was selected not only for convenience but to represent generally the type of population with which the instrument is ultimately intended to be used. This population is comprised of educators and other persons interested in and knowledgeable about schools.

<sup>3</sup>SPTI (II) contained 72 items, 34 of which were retained from SPTI (I).



since the meanings attributed will later provide the only conceptual basis for interpreting subscale scores.

## THE FINDINGS

### Findings Related to the Research Questions

Stability. The stability of the factors was tested by analyzing the extent to which the 34 retained items clustered similarly on SPTI (II) to the way they had clustered on SPTI (I). The results of this test proved quite satisfactory (Table 1).<sup>4</sup>

Meanings. The accuracy of the researcher's understandings of the meanings of the factors was tested by writing new items and analyzing the extent to which new items loaded with old items as predicted. This analysis suggests that some of these understandings were sound, whereas others misinterpreted what was really going on in the collective consciousness of the respondents.

Of the twelve factors which emerged from analyzing responses to SPTI (I), seven appeared in essentially the same form among the ten factors constituting the subscales of SPTI (III) PRELIM, a refined 46 item subset of SPTI (II):

1. Developing and maintaining effective staff relations.
2. Supervising non-professional personnel.
3. Developing and maintaining effective community relations.
4. Making decisions about professional personnel

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<sup>4</sup>85% of the items loaded as expected (i.e., their prime loadings were with the same items on SPTI (II) as they were on SPTI (I). The remaining 15% of the test items loaded not as predicted in their prime loadings; however, all of their secondary loadings were, respectively, on the predicted factors. These secondary loadings were all of the order of .39 or higher.



5. Developing and implementing educational goals.
6. Maintaining the principal's own professional growth.
7. Maintaining order and routines.

Other factors did not hold up empirically; rather their items combined in unpredicted ways with others such as to indicate that the initial interpretations were not valid. Reinterpretation suggests the following:

1. "Recruiting and Selecting Professional Personnel for the School," which was predicted as a probable factor is apparently not viewed as a separate role dimension; rather the selecting and hiring of personnel are seen as part of a larger dimension, "Making Decisions about Professional Personnel;"

2. "Managing the Resources of the School," which was initially defined broadly in a kind of program budgeting mind set was actually construed more narrowly by most respondents and limited quite closely to fiscal accounting and reporting (in the maintenance, not the leadership task domain);

3. There is no modal conception of "Maintaining the Relative Status and Prestige of the School," per se, but rather the suggestion that status comes about, in the perception of the respondents, as a result of effective leadership in a number of more conceptually coherent task domains (e.g., community relations and monitoring and communicating student achievement data in relation to other schools);

4. There is no conceptually identifiable task dimension which neatly subsumes expectations for the principal to encourage the professional growth of school personnel; in fact, it is quite clear from the data that respondents viewed school personnel as distinctly divided into two populations of concern to the principal: professional personnel and non-professional personnel (with teacher aides falling

somewhere between teachers and clerical/custodial personnel);

5. The principal's responsibility for monitoring the effectiveness of the school was not defined by respondents primarily in output terms (i.e., student achievement), as had been predicted; rather it was defined more broadly to include monitoring the work of students, teachers, and teacher aides, as well as evaluating educational innovations.

SPTI (III) PRELIM: factor pattern. SPTI (II) data from 334 respondents were factor analyzed both orthogonally (BMD X72) and obliquely (Kaiser Little Jiffy Mark III). Results on the two types of analysis were quite consistent with one another but the oblique rotation produced greater conceptual clarity overall and was chosen as the basis for reporting the results.

The 72 items of SPTI (II) were reduced to 46 items and conceived of as a tentative instrument, SPTI (III) PRELIM. This instrument provides a basis for the development of a third generation instrument, SPTI (III). Both first and second order oblique factor analyses were performed on the responses to the items comprising SPTI (III) PRELIM.

Ten first order factors emerged, all of which seem conceptually interpretable.<sup>5</sup> Seven of these constitute five-item subscales. The remaining three contain, respectively, two, three and six items (Table 2).

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<sup>5</sup>The overall measure of sampling adequacy (MSA) was computed at .89 and the overall index of factorial simplicity (IFS) at .81. Both are in the "good" range. (Kaiser, 1970; Kaiser & Rice, 1972)

The first order factors are as follows:

- I. Developing and maintaining effective staff relations.
- II. Supervising non-professional personnel.
- III. Developing and maintaining effective community relations.
- IV. Making decisions about professional personnel.
- V. Developing and implementing educational goals.
- VI. Maintaining the principal's own professional growth.
- VII. Monitoring the performance of students and teachers in achieving the goals of the school.
- VIII. Maintaining order and routines.
- IX. Monitoring and communicating student achievement data in relation to other schools.
- X. Managing the finances of the school.

Within factor root mean square correlations ranged from a low of .37 (Factors VII and IX) to a high of .63 (Factor IV). The median RMS was .50.

The second order factor analysis suggests two grand factors as major task domains for school principals (Table 3): (I) Leadership and (II) Maintenance. These results are consistent with Lippam's conceptual distinction between what he called "leadership" and "administrative" behaviors (1964). What is particularly interesting is the very high correlation (.80) which obtained between these two major task dimensions. This is not surprising; it is in fact quite consistent with the idea that an executive cannot exert effective leadership unless he is first able to accomplish the basic maintenance functions of the organization.

TABLE 1. Loadings of Common Items on SPTI (I) and SPTI (II) Factors.

<u>Item</u>	<u>SPTI (I) Factors and Loadings</u>	<u>SPTI (II) Factors and Loadings</u>
	<u>Factor A</u>	<u>Factor 5</u>
7	.54	.51
59	.52	.51*
71	.71	.80
72	.72	.76
	<u>Factor B</u>	<u>Factor 6</u>
2	.73	.75
21	.53	.72
25	.70	.62
57	.75	.39*
66	.64	.50
68	.60	.42*
	<u>Factor C</u>	<u>Factor 3</u>
8	.64	.48
11	.56	.55
18	.73	.75
19	.74	.63
67	.61	.46*

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\*These items had higher loadings on another factor (all on Factor 1 except No. 60 which had a higher loading on Factor 5).

(Table 1, continued)

	<u>Factor D</u>	<u>Factor 4</u>
1	.64	.60
30	.70	.76
50	.69	.78
56	.66	.60
	<u>Factor E</u>	<u>Factor 2</u>
17	.69	.77
26	.79	.64
	<u>Factor F</u>	<u>Factor 3</u>
20	.78	.72
32	.81	.51
	<u>Factor G</u>	<u>Factor 5</u>
35	.73	.70
47	.79	.54
	<u>Factor H</u>	<u>Factor 1</u>
61	.80	.69
	<u>Factor I</u>	<u>Factor 1</u>
40	.63	.44
42	.73	.51
70	.60	.75
	<u>Factor J</u>	<u>Factor 7</u>
37	.82	.68
38	.66	.64
	<u>Factor K</u>	<u>Factor 2</u>
36	.82	.71
55	.62	.72
60	.82	.50*

TABLE 2. SPTI (III) PRELIM: First Order Factors: Items, Item Loadings, and Relative Contributions of Factors (%).

Factor 1: Developing and Maintaining Effective Staff Relations (15.0%)

- |     |   |
|-----|---|
| .87 | 1. Establishing procedures for staff members to communicate to the principal interpersonal barriers with him.         |
| .72 | 2. Establishing procedures for staff members to communicate to the principal interpersonal barriers among themselves. |
| .72 | 3. Helping individual staff members work better together.   |
| .62 | 4. Handling staff grievances.   |
| .57 | 5. Sharing budget information with teachers and others involved in program planning and implementation.               |

Factor 2: Supervising Non-professional Personnel (13.6%)

- |     |   |
|-----|---|
| .80 | 1. Evaluating the performance in the school of clerical and custodial personnel.                  |
| .75 | 2. Hiring, firing and promoting clerical and custodial personnel in the school.                   |
| .71 | 3. Setting criteria for the performance in the school of clerical and custodial personnel.        |
| .61 | 4. Encouraging the professional growth of the clerical and custodial staff.                       |
| .38 | 5. Hiring, firing and promoting teacher aides and other paraprofessional personnel in the school. |

Factor 3: Developing and Maintaining Effective Community Relations (12.2%)

- |     |   |
|-----|---|
| .75 | 1. Maintaining the status of the school in the community.   |
| .73 | 2. Developing and maintaining contacts with parents and other individuals in the local community. |
| .73 | 3. Developing and maintaining contacts with formal and informal groups in the local community.    |
| .68 | 4. Keeping parents and other citizens informed about the achievements of the school.              |
| .67 | 5. Communicating educational goals to the local community.  |

(Table 2, continued)

Factor 4: Making Decisions about Professional Personnel (11.7%)

- .86 1. Dismissing professional personnel from the school.
- .83 2. Transferring professional personnel from the school.
- .42 3. Selecting and hiring professional personnel for the school.

Factor 5: Developing and Implementing Educational Goals (11.4%)

- .82 1. Planning the instructional program.
- .73 2. Developing educational goals.
- .63 3. Developing performance criteria for students.
- .55 4. Assessing educational needs.
- .53 5. Implementing educational goals in the school.

Factor 6: Maintaining the Principal's Own Professional Growth (10.4%)

- .76 1. Reading professional books and journals.
- .69 2. Attending courses and workshops organized by universities or professional associations.
- .67 3. Attending professional meetings and conferences.
- .56 4. Belonging to professional associations.
- .45 5. Participating in professional development activities with other school principals.

Factor 7: Monitoring the Performance of Students and Teachers in Achieving the Goals of the School (9.8%)

- .85 1. Setting criteria for the performance in the school of teacher aides and other paraprofessional personnel.
- .59 2. Evaluating the performance in the school of teacher aides and other paraprofessional personnel.
- .47 3. Comparing student achievement with the stated educational goals of the school.
- .46 4. Evaluating educational innovations.
- .44 5. Observing teachers teach.
- .43 6. Encouraging the professional growth of teacher aides and other paraprofessionals.



(Table 2, concluded)

Factor 8: Maintaining Order and Routines (6.6%)

- .68 1. Maintaining routine student discipline.
- .68 2. Enforcing school procedures, rules and regulations.
- .41 3. Scheduling classes.
- .37 4. Determining school procedures, rules and regulations.
- .35 5. Monitoring bus schedules and operations for the school.

Factor 9: Monitoring and Communicating Student Achievement Data in Relation to Other Schools (4.8%)

- .57 1. Comparing student achievement in the school to student achievement in other schools.
- .47 2. Keeping others in the state and region informed about the achievements of the school.
- .40 3. Relating student achievement to costs.
- .35 4. Keeping other principals and teachers in other schools informed about the achievements of the school.
- .34 5. Analyzing the trend of student achievement in the school over a period of years.

Factor 10: Managing the Finances of the School (4.4%)

- .61 1. Preparing financial reports for the central administration.
- .56 2. Analyzing program costs submitted by teachers and others involved in program planning and implementation.

TABLE 3. SPTI (III) PRELIM: Second Order Factors: First Order Factors and Loadings, Relative Contributions of Second Order Factors (%).\*

Grand Factor 1: Leadership (62.5%)

- |      |  |
|------|--|
| .89  | 1. Developing and maintaining effective staff relations.     |
| .86  | 2. Developing and maintaining effective community relations. |
| .72  | 3. Developing and implementing educational goals.            |
| .58  | 4. Maintaining the principal's own professional growth.      |
| .43  | 5. Making decisions about professional personnel.            |
| -.35 | 6. Maintaining order and routines.                           |

Grand Factor 2: Maintenance (37.5%)

- |     |  |
|-----|--|
| .85 | 1. Supervising non-professional personnel.   |
| .79 | 2. Maintaining order and routines.   |
| .60 | 3. Monitoring the performance of students and teachers in achieving the goals of the school. |
| .57 | 4. Managing the finances of the school.  |
| .38 | 5. Monitoring and communicating student achievement data in relation to other schools.       |

\*The intercorrelation between the two second order factors was computed at .80.

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